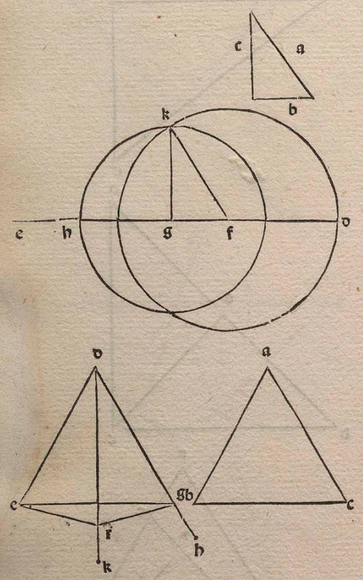
Data recta linea sup terminū eius cuilibet angulo ꝓposito equum angulum designare.

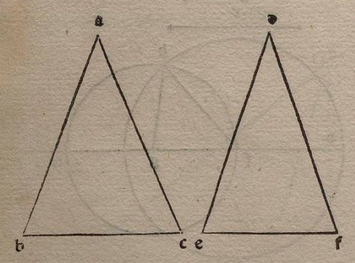
Sit data linea.f.e.que ē in superiori figura: ⁊ sint lince.b.a.ꝓtinentes ãgulū datū cui subtēndā basim.c.sup pūctū.f.linee.e.f.iubere facere eqle angulū angulo dato ad lineā.e.f.adiūgo.f.d.eqlem linee.a ⁊ ex f.e.sūmo.f.g.eqlē.b.⁊ ex.g.c.sūmo.g.b.eqlē.c.⁊ sup puncta.f.⁊.g. describo duos circulos.d.k.⁊.k.h.bm quantitatē duarū linearū.f.d.⁊.g.b.⁊ inſecātes se in pūcto.k.sicut docuit p̄cedēs: ductisq; lineis.k.f.⁊.k.g.erūt eqlia duo latera.k.f.⁊.f.g.trianguli.k.f.g.duobus laterib⁹.a.⁊.b.trianguli.a.b.c.⁊ basis.g.k eqlis basi.c.ergo p.s.angul⁹.k.f.g.eqł erit angulo ꝓtēto.ab.a.⁊ a.b.qō ē ꝓpositum.



Propositio 24.

Omniū duox triangulox quox duo latera vni⁹ duob⁹ laterib⁹ alteri⁹ fuerint eqlia: si fuerit angulox iub illis eqs laterib⁹ ꝓtētox alter altero maior basis quoq; eiusdē basi alterius maior erit.

Sint duo triāguli.a.b.c.⁊.d.e.f.sintq; duo latera.a.b.⁊.a.c. eqlia duob⁹ laterib⁹.d.e.⁊.d.f.⁊ vnūquodq; suo correlatio dextrū.ſ.dextro: sinistrū q; sinistro: sitq; angulus.a. maior angulo d. dato: dico q; basis.b.c. maior erit basi.e.f. faciā.n. iuxta doctrinā p̄cedentis.e.d.g.eqlē angulo.a. eritq; ãgulus.e.d.f. ps ei⁹ ⁊ ponā.d.g.eqlē.a.c.⁊ ꝓtrahā.e.g.q̄ aut trāsibit sup̄.e.f. vt secet lineā.d.f. aut sup.e.f. vt sit secū linea vna: aut infra. Transeat ergo ꝓmo sup̄: ⁊ q⁊.a.b.⁊.a.c latera triāguli.a.b.c.ſt eqlia.e.d.⁊.d.g. laterib⁹ trianguli.e.d.g.⁊ angul⁹.a. angulo.d. totali: erit p.8. basis.b.c. eqlis basi.e.g. At vo q⁊.d.g.⁊.d.f. sūt eqles: nam vtraq; ē eqlis.a.c. erit p.5. angul⁹.d.f.g. eqlis angulo.d.g.f. q̄re d.f.g. maior erit f.g.e. g̃.e.f.g. multo fortiꝰ maior ē eodē. f.g.e. g̃ p.is. lat⁹.e.g. mai⁹ ē latere.e.f. q̄re ⁊.b.c. maior ē.e.f. qō ē ꝓpositū. Si vo.c.g. trāseat sup.e.f. ⁊ sit secū linea vna tūc e.f. erit ps.e.g. p vltimā g̃ occeptōem p⁊ ꝓpositū. Si vo.c.g. trāseat infra.e.f. ꝓtrahant due linee.d.f.⁊.d.g. q̄ sūt eqles vt ꝓbatū ē vsq; ad.k.⁊ ad.h. fiēt q; p scōaꝫ ptē. qnte sub basi.f.g. anguli.k.f.g.⁊.f.g.h. eqles. q̄re angul⁹.e.f.g. maior erit angulo.f.g.e. ergo p.18. lat⁹.e.g. mai⁹ ē latere.e.f. q̄re.b.c. maior ē.e.f. qō ē ꝓpositū. Istud vltimū mēbrū posꝫ ēt ꝓbari p. 21. p. ipsā. n. erunt i dispositōe ītia due lince.d.g.⁊.e.g. maiores duabus lineis.d.f.⁊.f.e.⁊ q⁊.d.g. ē eqlis .d.f. ꝓpt hoc q; ambe sūt eqles.a.c. erit.g.e. maior.e.f. q̄re ⁊.b.c. maior: qō ē ꝓpositū: melius tñ est demonstrare p⁊ior mō vt in omni dispositōe arguaꝫ per quintam.



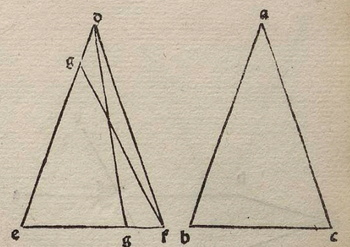
Propositio 25.

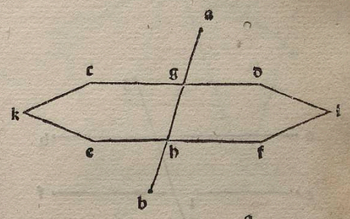
Omniū duox triangulox quox duo latera vni⁹ duob⁹ laterib⁹ alteri⁹ fuerint eqlia: basis vo vni⁹ basi alteri⁹ fuerit maior: erit quoq; angul⁹ trianguli maioris illis eqs laterib⁹ contentus angulo alterius se respiciente maior.

Sint duo triāguli.a.b.c. d.e.f. sintq; duo lata.a.b.⁊.a.c. ꝑmi eqlia duob⁹ laterib⁹.d.e.⁊.d.f. scōi vnūquodq; suo correlatio: sitq; basis.b.c. maior basi.e.f. dico q; āgul⁹.a. maior erit anglo.d. hec ē ꝓuersa p̄cedētis: Eqlis q̄dē non erit: sic.n. esset p.4. basis.b.c. eqlis basi.e.f. qō ē ȳ ypothesym: sed nec minor quia sic esset.d. maior: ⁊ ita p p̄cedētē basis.e.f. erit maior basi.b.c. qō ē ōriū ꝓpositiōi q̄re maior erit sicq; ꝓpositū astruit. Propō .26.

Omnium duox triangulox quox duo anguli vnius duobus angulis alterius ⁊ vterq; se respicienti eqles fuerint latus quoq; vni⁹ lateri alterius equale: fueritq; latus illud inter duos angulos eqles aut vni eox oppositū: erūt quoq; duo vni⁹ reliq; latera duob⁹ reliq̄s alteri⁹ trianguli laterib⁹ vnūquodq; se respicienti equalia: angulusq; reliquus vnius angulo reliquo alterius equalis.

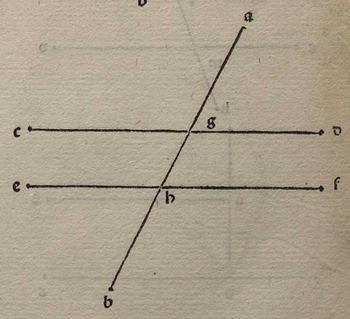
Sint duo trianguli.a.b.c. d.e.f. sitq; angulus.b. eqlis angulo.e. ⁊.angulus.c. equalis ãgulo.f. sitq; latus.b.c. eqle lateri.e.f. aut alterū duox laterū.a.b.⁊.a.c. equale alteri duox laterū.d.e.⁊.d.f. ita q⁊.a.b. sit eqle d.e. aut.a.c.d.f. dico q; reliqua duo latera vni⁹ erūt eqlia reliq̄s duob⁹ laterib⁹ alteri⁹ ⁊ reliqu⁹ angul⁹ reliquo angulo eqlis: ãgul⁹ vꝫ.a. ãgulo.d. ponā ergo ꝓmo vt lat⁹.b.c. sup qō iacent anguli b.c. sit eqle lateri.e.f. sup qō iacent anguli.e.f. qui positi sūt eqles angulis.b.c. tūc dico q; latus.a.b. est eqle lateri.d.e.⁊ latus.a.c. lateri.d.f.⁊ angulus.a. angulo.d Si.n. latus.a.b. non sit equale lateri.d.e. alterū erit maius: sit ergo maior.d.e. qō resecabo ad equalitatē.a.b. sitq; g.e. equale.a.b.⁊ ꝓducā lineā.g.f. eritq; per.4. angulus.g.f.e. eqlis angulo.a.c.b. q̄re ⁊ angulo.d.f.e. ps toti quod ē ipossibile: erit ergo .d.e. eqle.a.b. ergo p.4.d.f. eqle.a.c.⁊ angulus.d. eqlis angulo.a. qō est ꝓmū mēbrū diuisiōis ꝓpositē: Sint rursus vt p⁊ duo anguli.b.⁊.c. eqles duobus angulis.e.⁊.f. sitq; latus.a.b. quod opponit angulo.c. eqle lateri.d.e. qō opponit angulo.f. cui positus ē eqlis angulus.c. dico q; latus.b.c. erit eqle lateri.e.f ⁊ latus.a.c. lateri.d.f.⁊ angulus.a. angulo.d. Si.n. latus.e.f. nō fuerit equale lateri.b.c. erit alterū maius: sit ergo.e.f. maius: ponaꝫ itaq;.e.g. eqle.b.c. ⁊ ꝓducā lineā.d.g. eritq; p.4. angulus.d.g.c. equalis angulo.a.c.b. q̄re ⁊ angulo.d.f.e. extrinsec⁹ videlz intrinseco qō ē ipossibile: p.16. erit ergo.e.f. eqle.b.c. ergo p.4. latus.d.f. equale lateri.a.c.⁊ angulus.d. totalis angulo.a. qō ē scōm mēbr̄ diuisionis ꝓpositē: q̄re totū manifeste p⁊. Propositio .27.





Si recta linea sup duas lineas rectas ceciderit duosq; angulos coalternos sibiūicē equales fecerit ille due linee erūt equidistantes.

Sit vt linea.a.b. cadat super duas lineas.c.d.⁊.e.f.⁊ secet lineā c.d. in puncto.g.⁊ lineam.e.f. in puncto.h. sitq; angulus.d.g.h. eqlis angulo.e.h.g. dico q; lince.c.d.⁊.e.f. sūt eqdistātes. Si.n. nō ꝓcurrant aut ad ptē.c.e. sup pūctū.k. aut a ptē.d.f. sup pūctū.l.⁊ q̄lūcūq; fuerit accidet ipossibile p.16. videlz angulū extrinsecū cē eqlē itrinseco: nā vn⁹ dictox angulox coalternox q̄ positi sūt eqles erit extrinsec⁹ ⁊ reliquus intrinsec⁹: q⁊ igit̄ ipossibile ē eas ꝓcurrē i alterutrā ptē ,ptractas ipse p diffinitōem erūt eqdistātes: quod est ꝓpositum.



Propositio .28.

Si linea recta duabus lineis rectis supuenerit fueritq; angulus eius itrinsecus angulo extrinseco sibi opposito equalis aut duo anguli itrinseci ex vna parte duob⁹ angulis rectis eqles ille due linee equidistantes erunt.

Sit vt linea.a.b. secet duas lineas.c.d.⁊.e.f.i pūcto g.⁊.b. sitq; angulus.g. extrinsecus equalis angulo.h. intrinseco ex eadem parte sumpto: aut duo anguli.g.⁊.h. intrinseci ex eadeꝫ parte sumpti sint equales duobus angulis